Please replace the paragraph beginning on page 52, line 31 with the following paragraph:

PS1: Full-length human PS1 cDNA and cDNA encoding the PS1 A246E substitution were generated by RT-PCR of cytoplasmic RNA isolated from skin fibroblasts of a patient harboring the A246E mutation (NIA Cell Repository #AG06848B) using a sense primer, hAD3-ATG-Kpn (GGGGTACCATGACAGAGTTACCTGCAC, SEQ ID NO:10), and antisense primer, hAD3-R-3'UTR (CCGGGATCCATGGGATTCTAACCGC, SEQ ID NO:11). PCR products were digested with Asp718 and BamHI and ~1.4 kB hPS1 cDNAs were gel purified and ligated to Bluescript KS+ vector (Stratagene, La Jolla, CA.) previously digested with Asp718 and BamHI, to generate phPS1 and phPS1A246E. The cDNAs were sequenced in their entirety using a Sequenase kit (U.S. Biochemical Corp., Cleveland, OH).

Please replace the paragraph beginning on page 53, line 11 with the following paragraph:

For M146L, primer pairs were hAD3-M146LF (GTCATTGTTGTCCTGACTATCCTCCTG, SEQ ID NO:12) /hAD3-R284 (GAGGAGTAAATGAGAGCTGG, SEQ ID NO:13) and hAD3-M146LR (CAGGAGGATAGTCAGGACAACAATGAC, SEQ ID NO:14) /hAD3-237F (CAGGTGGTGGAGCAAGATG, SEQ ID NO:15). PCR products from each reaction were gel purified, combined and subject to a second round of PCR with primers hAD3-237F and hAD3-R284. The resulting product was digested with KasI and PflMI and an ~300 bp gel purified fragment was ligated to KasI/PflMI-digested phPS1 to generate phPS1MI46L. For H163R, primer pairs were hAD3-H163RF (CTAGGTCATCCGTGCCTGGC, SEQ ID NO:16) /hAD3-R284 and hAD3-

H163RR (GCCAGGCACGGATGACCTAG, SEQ ID NO:17) /hAD3-237F. PCR products from each reaction were gel purified, combined and subject to a second round of PCR with primers hAD3-237F and hAD3-R284. The resulting products were digested with KasI and PflMI and a gel-purified ~300 bp fragment, was ligated to KasI/PflMI-digested phPS1 to generate phPS1H163R.

Please replace the paragraph beginning on page 53, line 28 with the following paragraph:

For L286V, primer pairs were hAD3-L286VF (CGCTTTTTCCAGCTGTCATTTACTCC, SEQ ID NO:18) / hAD3-RL-GST (CCGGAATTCTCAGGTTGTGTTCCAGTC, SEQ ID NO:19) and hAD3-L286VR (GGAGTAAATGACAGCTGGAAAAAGCG, SEQ ID NO:20) / hAD3-F146 (GGATCCATTGTTGTCATGACTATC, SEQ ID NO:21). PCR products from each reaction were gel purified, combined and subject to a second round of PCR with primers hAD3-F146 and hAD3-RL-GST. The resulting products were digested with PflMI and BbsI and a gel purified ~480 bp fragment was ligated to PflMI/BbsI-digested phPS1 to generate phPS1L286V.

Please replace the paragraph beginning on page 53, line 39 with the following paragraph:

For C410Y, primer pairs were hAD3-C410YF (CAACCATAGCCTATTTCGTAGCC, SEQ ID NO:22) /LRT7 (GCCAGTGAATTGTAATAGGACTCACTATAGGGC, SEQ ID NO:23) and hAD3-C410YR (GGCTACGAAATAGGCTATGGTTG, SEQ ID NO:24) /hAD3-243S (CCGGAATTCTGAATGGACTGCGTG, SEQ ID NO:25). PCR products from each reaction were gel purified, combined and subject to a second round of PCR with primers hAD3-